

### Claims

1. Polyclonal antibody anti-UBE4A/Ufd2b.
2. Antibody according to claim 1, characterized by being specific for the human and murine UBE4A protein antigen in the portion relative to the sequence of the epitope at the 10- 27 position.
3. Antibody according to claim 2, characterized in that said sequence, corresponding to amino acids 10 to 27 in the sequence of the human and murine UBE4A protein is composed as follows: Ile-Ser-Ser-Asn-Pro-Phe-Ala-Ala-Leu-Phe-Gly-Ser-Leu-Ala-Asp-Ala-Lys-Gln.
4. Antibody according to claim 3, characterized in that it is conjugated with bovine serum albumine (BSA) as a carrier protein.
5. Immunohistochemical method to determine UBE4A/Ufd2b protein antigen using the antibody according to one or more of claims 1-4.
6. Diagnostic and prognostic method to determine molecular abnormalities in the region 11q23 characterized in that it includes a step wherein the antibody according to one or more of claims 1-4 selettively reacts with the UBE4A/Ufd2b protein antigen
7. Method according to claim 6, characterized in that said molecular alterations are consequent to tumours: Neuroblastoma, Acute Lymphoid Leukaemia, Acute Myeloid Leukaemia.
8. Method to evidence any misregulation of the UBE4A/Ufd2b expression in samples of neoplastic human tissues affected by neurodegenerative diseases using Immunohistochemistry.

9. Diagnostic and prognostic kit to be used as a marker of the alterations of the region 11q23, characterized in that it includes the antibody according to one or more of previous claims.